From the INTERNATIONAL SEARCHING AUTHORITY

To:	PCT
LEE, Young-Pil	101
The Cheonghwa Building 1571-18, Seocho-dong, Seocho-gu, Seoul 137-874, Republic of Korea P. F. MOCK & PARTNERS APR - 7 2004	NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION (PCT Rule 44.1)
RECEIVED	Date of mailing (day/month/year) 31 MARCH 2004 (31.03.2004)
Applicant's or agent's file reference PH-18194-PCT	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No. PCT/KR2003/002851	Intrenational filing date (day/month/year) 26 DECEMBER 2003 (26.12.2003)
Applicant	
POSTECH FOUNDATION et al	
1. X The applicant is hereby notified that the international	search report has been established and is transmitted herewith.
Filing of amendments and statement under Article The applicant is entitled, if he so wishes, to amend the When? The time limit for filing such amendments i international search report.	
Where? Directly to the International Bureau of WI 34, chemin des Colombettes 1211 Geneva 20, Switzerland	
For more detailed instructions, see the notes on the	4.35
2. The applicant is hereby notified that no international surface 17(2)(a) to that effect is transmitted herewith.	earch report will be established and that the declaration under
the protest together with the decision theron has b	Iditional fee(s) under Rule 40.2, the applicant is notified that: een transmitted to the International Bureau together with the protest and the decision theron to the designated Offices.
no decision has been made yet on the protest; the	applicant will be notified as soon as a decision is made.
4. Reminders	
applicant wishes to avoid or postpone publication, a notice of w	l application will be published by the International Bureau. If the ithdrawal of the international application, or of the priority claim, and 90bis.3, respectively, before the completion of the technical
examination must be filed if the applicant wishes to postpone th	some designated Offices, a demand for international preliminary e entry into the national phase until 30 months from the priority within 20 months from the priority date, perform the prescribed fices.
In respect of other designated Offices, the time limit of 30 mont	ths(or later) will apply even if no demand is filed within 19 months.
See the Annex to Form PCT/IB/301 and, for details about the ap Guide, Volume II, National Chapters and the WIPO Internet site	

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
920 Dunsan-dong, Seo-gu, Daejeon 302-701,
Republic of Korea

Facsimile No 82 42 472 7140

Authorized officer

COMMISSIONER

Telephone No. 82-42-481-5762





PCT

NOTIFICATION OF RECEIPT OF RECORD COPY

(PCT Rule 24.2(a))

From the INTERNATIONAL BUREAU

To:

LEE, Young-Pil The Chunghwa Building 1571-18 Seocho-dong, Seocho-gu 137-874 Seoul

Republic of Korea

FEB - 5 2004

Date of mailing (day/month/year)
19 January 2004 (19.01.2004)

Applicant's or agent's file reference
PH-18194-PCT

IMPORTANT NOTIFICATION

International application No.
PCT/KR2003/002851

The applicant is hereby **notified** that the International Bureau has received the record copy of the international application as detailed below.

Name(s) of the applicant(s) and State(s) for which they are applicants:

POSTECH FOUNDATION (for all designated States except US)

LEE, Kun-Hong et al (for US)

International filing date

26 December 2003 (26.12.2003)

Priority date(s) claimed

15 January 2003 (15.01.2003)

Date of receipt of the record copy by the International Bureau

09 January 2004 (09.01.2004)

List of designated Offices

EP:AT,BE,BG,CH,CY,CZ,DE,DK,EE,ES,FI,FR,GB,GR,HU,IE,IT,LU,MC,NL,PT,RO,SE,SI,SK,TR National:CN,JP,US

ATTENTION

The applicant should carefully check the data appearing in this Notification. In case of any discrepancy between these data and the indications in the international application, the applicant should immediately inform the International Bureau.

In addition, the applicant's attention is drawn to the information contained in the Annex, relating to:

X time limits for entry into the national phase - see updated important information (as of April 2002)

X confirmation of precautionary designations (if applicable)

requirements regarding priority documents (if applicable)

A copy of this Notification is being sent to the receiving Office and to the International Searching Authority.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer:

Catherine MONDON (Fax 338-8995)

Facsimile No. (41-22) 338-70-90

Telephone No. (41-22) 338 9074





INFORMATION ON TIME LIMITS FOR ENTERING THE NATIONAL PHASE

The applicant is reminded that the "national phase" must be entered before each of the designated Offices indicated on the cover sheet of this Notification by paying national fees and furnishing translations, as prescribed by Articles 22 and 39 and the applicable national laws. In addition, the applicant may also have to comply with other special requirements applicable in certain Offices. It is the applicant's responsibility to ensure the necessary steps to enter the national phase are taken in a timely fashion. Most Offices do not issue reminders to applicants in connection with the entry into the national phase.

The applicable time limit for entering the national phase will, subject to what is said in the following paragraph, be 30 MONTHS from the priority date, not only in respect of any elected Office where a demand for international preliminary examination is filed before the expiration of 19 months from the priority date (see Article 39(1)), but also in respect of any designated Office, in the absence of filing of such demand, where Article22(1) as modified with effect from 1 April 2002 applies in respect of that designated Office. For further details, see PCT Gazette No. 44/2001 of 1 November 2001, pages 19926, 19932 and 19934, as well as the PCT Newsletter, October and November 2001 and February 2002 issues.

In practice, time limits other than the 30-month time limit will continue to apply, for various periods of time, in respect of certain designated or elected Offices. For regular updates on the applicable time limits (20, 21, 30 or 31 months, or other time limit), Office by Office, refer to the PCT Gazette("Section IV" part published on a weekly basis), to the PCT Newsletter (on a monthly basis) and to the relevant National Chapters in Volume II of the PCT Applicant's Guide (the paper version of which is updated usually twice a year and the Internet version of which is updated usually on a weekly basis). Finally, a cumulative table of all applicable time limits for entering the national phase is available from WIPO's Internet site, via links from various pages the site including those of the Gazette, Newsletter and Guide, at http://www.wipo.int/pct/en/index.html.

Information about the requirements for filing a demand for international preliminary examination is set out in the PCT Applicant's Guide, Volume I/A, Chapter IX. Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination (at present, all PCT Contracting States are bound by Chapter II).

CONFIRMATION OF PRECAUTIONARY DESIGNATIONS

This notification lists only specific designations made under Rule 4.9(a) in the request. It is important to check that these designations are correct. Errors in designations can be corrected where precautionary designations have been made under Rule 4.9(b). The applicant is hereby reminded that any precautionary designations may be confirmed according to Rule 4.9(c) before the expiration of 15 months from the priority date (this time limit may not be extended). If it is not confirmed, it will automatically be regarded as withdrawn by the applicant. There will be no reminder and no invitation. Confirmation of a designation consists of the filing of a notice specifying the designated State concerned (with indication of the kind of protection or treatment desired) and the payment of the designation and confirmation fees. The Notice of confirmation and payment must reach the receiving Office within the 15-month time limit.

REQUIREMENTS REGARDING PRIORITY DOCUMENTS

For applicants who have not yet complied with the requirements regarding priority documents, the following is recalled.

Where the priority of an earlier national, regional or international application is claimed, the applicant must submit a copy of the said earlier application, certified by the authority with which it was filed ("the priority document") to the receiving Office (which will transmit it to the International Bureau) or directly to the International Bureau, before the expiration of 16 months from the priority date, provided that any such priority document may still be submitted to the International Bureau before that date of international publication of the international application, in which case that document will be considered to have been received by the International Bureau on the last day of the 16-month time limit (Rule 17.1(a)).

Where the priority document is issued by the receiving Office, the applicant may, instead of submitting the priority document, request the receiving Office to prepare and transmit the priority document to the International Bureau. Such request must be made before the expiration of the 16-month time limit and may be subjected by the receiving Office to the payment of a fee (Rule 17.1(b)).

If the priority document concerned is not submitted to the International Bureau or if the request to the receiving Office to prepare and transmit the priority document has not been made (and the corresponding fee, if any, paid) within the applicable time limit indicated under the preceding paragraphs, any designated State may disregard the priority claim, provided that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within the time limit which is reasonable under the circumstances.

Where several priorities are claimed, the priority date to be considered for the purposes of computing the 16-month time limit is the filing date of the earliest application whose priority is claimed.



To:

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING **SUBMISSION OR TRANSMITTAL** OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

POSTECH FOUNDATION et al

LEE, Young-Pil The Chunghwa Building 1571-18 Seocho-dong, Seocho-gu 137-874 Seoul

Republic of Korea

FEB - 5 2004
IMPORTANT NOTIFICATION
International filing date (day/month/year) 26 December 2003 (26.12.2003)
Priority date (day/month/year) 15 January 2003 (15.01.2003)

- By means of this Form, which replaces any previously issued notification concerning submission or transmittal of priority documents, the applicant is hereby notified of the date of receipt by the International Bureau of the priority document(s) relating to all earlier application(s) whose priority is claimed. Unless otherwise indicated by the letters "NR", in the right-hand column or by an asterisk appearing next to a date of receipt, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- (If applicable) The letters "NR" appearing in the right-hand column denote a priority document which, on the date of mailing of this Form, had not yet been received by the International Bureau under Rule 17.1(a) or (b). Where, under Rule 17.1(a), the priority document must be submitted by the applicant to the receiving Office or the International Bureau, but the applicant fails to submit the priority document within the applicable time limit under that Rule, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
- (If applicable) An asterisk(*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b) (the priority document was received after the time limit prescribed in Rule 17.1(a) or the request to prepare and transmit the priority document was submitted to the receiving Office after the applicable time limit under Rule 17.1(b)). Even though the priority document was not furnished in compliance with Rule 17.1(a) or (b), the International Bureau will nevertheless transmit a copy of the document to the designated Offices, for their consideration. In case such a copy is not accepted by the designated Office as priority document, Rule 17.1(c) provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

Priority date Priority application No. Country or regional Office Date of receipt or PCT receiving Office of priority document

15 Janu 2003 (15.01.2003) 10-2003-0002716 KR 09 Janu 2004 (09.01.2004)

> The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

Catherine MONDON (Fax 338-8995)

Facsimile No. (41-22) 338-70-90 Telephone No. (41-22) 338 9074

PATENT COOPERATION TREATY.

To:



NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

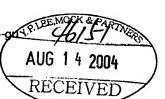
From the INTERN DNAL BUREAU

LEE, Young-Pil

The Chunghwa Building 1571-18 Seocho-dong, Seocho-gra

137-874 Seoul

RÉPUBLIQUE DE CORÉE



Date of mailing (day/month/year) 29 July 2004 (29.07.2004)

Applicant's or agent's file reference PH-18194-PCT

IMPORTANT NOTICE

International application No. PCT/KR2003/002851 International filing date (day/month/year) 26 December 2003 (26.12.2003)

Priority date (day/month/year) 15 January 2003 (15.01.2003)

Applicant

POSTECH FOUNDATION et al

Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this notice:

CN, EP, JP, US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

None

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

- Enclosed with this notice is a copy of the international application as published by the International Bureau on 29 July 2004 (29.07.2004) under No. WO 2004/064101
- 4. TIME LIMITS for filing a demand for international preliminary examination and for entry into the national phase

The applicable time limit for entering the national phase will, subject to what is said in the following paragraph, be 30 MONTHS from the priority date, not only in respect of any elected Office if a demand for international preliminary examination is filed before the expiration of 19 months from the priority date, but also in respect of any designated Office, in the absence of filing of such demand, where Article 22(1) as modified with effect from 1 April 2002 applies in respect of that designated Office. For further details, see PCT Gazette No. 44/2001 of 1 November 2001, pages 19926, 19932 and 19934, as well as the PCT Newsletter, October and November 2001 and February 2002 issues.

In practice, time limits other than the 30-month time limit will continue to apply, for various periods of time, in respect of certain designated or elected Offices. For regular updates on the applicable time limits (20, 21, 30 or 31 months, or other time limit), Office by Office, refer to the PCT Gazette, the PCT Newsletter and the PCT Applicant's Guide, Volume II, National Chapters, all available from WIPO's Internet site, at http://www.wipo.int/pct/en/index.html.

For filing a demand for international preliminary examination, see the PCT Applicant's Guide, Volume I/A, Chapter IX. Only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination (at present, all PCT Contracting States are bound by Chapter II).

It is the applicant's sole responsibility to monitor all these time limits.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

Idhir Britel

Facsimile No.+41 22 740 14 35

Facsimile No.+41 22 338 70 90

PATENT COOPERATION TREATY,



NAL BUREAU From the INTERN

INFORMATION CONCERNING ELECTED OFFICES NOTIFIED OF THEIR ELECTION

(PCT Rule 61.3)

To:

LEE, Young-Pil The Chunghwa Building 1571-18 Seocho-dong, S 137-874 Seoul

RÉPUBLIQUE DE CORÉE

02 September 2004 (02.09.2004)

Date of mailing (day/month/year)

Applicant's or agent's file reference PH-18194-PCT

IMPORTANT INFORMATION

International application No. PCT/KR2003/002851 International filing date (day/month/year) 26 December 2003 (26.12.2003) Priority date (day/month/year) 15 January 2003 (15.01.2003)

Applicant

POSTECH FOUNDATION et al

1. The applicant is hereby informed that the International Bureau has, according to Article 31(7), notified each of the following Offices of its election:

EP: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR National: CN, JP, US

The following Offices have waived the requirement for the notification of their election; the notification will be sent to them by the International Bureau only upon their request:

None.

The applicant is reminded that he must enter the "national phase" before the expiration of 30 months from the priority date before each of the Offices listed above. This must be done by paying the national fee(s) and furnishing, if prescribed, a translation of the international application (Article 39(1) (a)), as well as, where applicable, by furnishing a translation of any annexes of the international preliminary examination report (Article 36(3) (b) and Rule 74.1).

Some offices have fixed time limits expiring later than the above-mentioned time limit. For detailed information about the applicable time limits and the acts to be performed upon entry into the national phase before a particular Office, see Volume II of the PCT Applicant's Guide.

The entry into European regional phase is postponed until 31 months from the priority date for all States designated for the purposes of obtaining a European patent.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

Idhir Britel

Facsimile No.+41 22 740 14 35

Facsimile No.+41 22 338 70 90



From the

INTERNATIONAL PRELIMINARY EXAMINING

To: LEE, Young-Pil	PCT
The Cheonghwa Building 1571-18, Seocho-dong, Seocho-gu, Seoul 137-874, Republic of Korea	WRITTEN OPINION (PCT Rule 66)
JAN 2 7 2005 RECEIVED	Date of mailing (day/month/year) 20 JANUARY 2005 (20.01.2005)
Applicant's or agent's file reference PH-18194-PCT	REPLY DUE within 2 months from the above date of mailing
International application No. PCT/KR2003/002851 International filing date (26 DECEMBER 20	003 (26.12.2003) 15 JANUARY 2003 (15.01.2003)
International Patent Classification (IPC) or both national classificat IPC7 H01J 1/30 Applicant	ion and IPC
POSTECH FOUNDATION et al	
2. This opinion contains indications relating to the following items I Basis of the opinion II Priority III Non-establishment of opinion with regard to nove IV Lack of unity of invention V Reasoned statement under Rule 66.2(a)(ii) with recitations and explanations supporting such statem VI Certain documents cited VII Certain defects in the international application VIII Certain observations on the international application VIII See the time limit indicated above. The applicant me to grant an extension, see Rule 66.2(d)	elty, inventive step and industrial applicability gard to novelty, inventive step or industrial applicability; ent ion nay, before the expiration of that time limit, request this Authority exappropriate, by amendments, according to Rule 66.3 see Rules 66.8 and 66.9 ts, see Rule 66.4 nts and/or arguments, seeRule 66.4bis see Rule 66.6
4. The final date by which the international preliminary examination report must be established according to Rule 69.2	is: <u>05 MAY 2005 (05.05.2005)</u>



Name and mailing address of the IPEA/KR

Korean Intellectual Property Office
920 Dunsan-dong, Seo-gu, Daejeon 302-701,
Republic of Korea

Authorized officer

AHN, JOON JYUNG

Telephone No. 82-42-481-5984



Facsimile No. 82-42-472-7140



I. Basis of the opinion 1. With regard to the elements of the international application:* the international application as originally filed the description: , as originally filed pages , filed with the demand pages , filed with the letter of pages the claims: , as originally filed pages , as amended (together with any statment) under Article 19 pages , filed with the demand pages , filed with the letter of pages the drawings: as originally filed pages , filed with the demand pages filed with the letter of the sequence listing part of the description: , as originally filed pages , filed with the demand pages pages 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/ or 55.3). With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written opinion was drawn on the basis of the sequence listing: contained inthe international application in printed form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international applicationas as filed has been furinshed. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished. The amendments have resulted in the cancellation of: the description, pages the claims, Nos. the drawings, sheet/fig 5. This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box(Rule 70.2(c)). Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."



International aplication No.

PCT/KR2003/002851

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Novelty (N)	Claims 1-19	YES
	Claims None	NO
• • •	Claims 3-19	YES
	Claims 1-2	NO
••	Claims 1-19	YES
	Claims None	NO

2. Citations and explanations

1. Reference is made to the following documents:

. D1: JP10-199398A (1998.7.31)

D2: US5,148,078A (1992.09.15)

- 2. Claims 1-2 relate to a FED, comprising a substrate, a cathode layer, a gate insulating layer, a gate electrode layer, an anode insulating layer, emitter, a phosphor and anode.
- 3. D1 discloses an electron emitting device comprising a substrate, a cathode layer, a resist-ive layer, a gate insulating layer, a gate electrode layer and emitter. D2 discloses FED comprising a emitter layer(103), an insulating layer(105 and 106), a gate electrode layer(104), an insulator layer(208), and an anode layer.

As mentioned above, the features of Claims 1-2 are already disclosed in D1 and D2 in a similar fields of application, or are included among several straightforward possibilities or combinations from which a skilled person could select without the exercise of inventive skill. Therefore, the subject matters of Claims 1-2 lack an inventive step under PCT Article 33(3).

From the

INTERNATIONAL PRELIMINARY EXAMINING

To:

LEE, Young-Pil

The Cheonghwa Building 1571-18, Seocho-dong, Seocho-gu, Seoul 137-874, Republic of Korea

33109 MAY 1 @ 2005 PCT

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing (day/month/year)

09 MAY 2005 (09.05.2005)

IMPORTANT NOTIFICATION

Applicant's or agent's file reference PH-18194-PCT

International application No.

International filing date (day/month/year)

Priority date (day/months/year)

PCT/KR2003/002851 26

26 DECEMBER 2003 (26.12.2003)

15 JANUARY 2003 (15.01.2003)

Applicant

POSTECH FOUNDATION et al

- 1. The applicant is hereby notified that International Preliminary Examining Authority transmits here with the international preliminary examination report and its annexes, if any, established on the international application.
- 2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- 3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report(but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected office by performing certain acts (filing translations and paying national fees) within 30 month(s) from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details in the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/KR

1

Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

COMMISSIONER

Telephone No. 82-42-481-5131

